Physical Geography Processes Photo Essay
50 Points, 15 Photographs, 15 Paragraphs

The physical geography processes discussed in class and in your text is not only found in exotic locations, but in our own immediate environment. Being able to recognize physical processes in the landscape is an important goal in this course. The purpose of this assignment is for you to practice your skills of geographic observation within your own community by applying concepts and topics that we cover in class and the text to Orange County. You will want to be mindful of Orange County's particular geography in your discussion of the topic.

Remember – the purpose of your photo essay is to illustrate and describe the unique physical features and **processes** in Orange County. Don't take a picture of dew and say "It's humid". I know that, why did the dew form & what is it telling us? Don't plagiarize - I own the book and have read it myself.

Topics:

1. **Temperature Inversion Layer OR Lifting Condensation Level (LCL)**
   The inversion layer is unpredictable more than a day or so out bring your camera with you when you are out and about. LCL is common at times when inversions are not. You need to capture one or *the other.*
2. **Earth/Sun Relationships (*Declination of the Sun*)**
   Take a photograph of something with shadows and explain why and how the shadow length will vary throughout the year. Please note that this concept is not the same as day length.
3. **Humidity**
   Either high or low humidity. Explain what humidity is also.
4. **Rocks**
   Identify the rock type, how it formed why you classified it as such. It would be better if you used exposed bedrock where you can actually touch it as that will aid in the identification process.
5. **Atmospheric Lifting Mechanisms**
   There are four types though we don't get Convergent. Orographic lifting is easy & close too.
6. **Weather**
   Describe the weather for a particular day – include newspaper or online weather information for date. What were the contributing factors to that day's weather?
7. **Climate**
   Is NOT just a picture of nice weather – what is our climate and how does the vegetation reflect this? No palm tree or cactus pictures for this or #8.
8. **Climate Inappropriate**
   *What vegetation/landscaping is **not** appropriate for our climate and why?*
9. **Earthquakes**
   Earthquake preparation will suffice since we cannot predict an earthquake this semester. Do not just take a photo of a crack in the ground and say "earthquake". Why do we have earthquakes in OC?
10. **Mass Wasting/Movement (1)**
    Identify type of mass wasting and cause. You will need two different kinds (see #11).
11. **Mass Wasting/Movement (2)**
    Identify a different type of mass wasting and cause.
12. **Stream processes**
    Not just a pretty picture of a stream, I want a process, transportation, erosion, bed load…
13. **Coastal processes - Headland**
14. **Coastal processes – your choice**
    Not just a pretty picture of the beach, I want a process: sea stacks, spits, tombolos, etc…
15. **Free Choice**
    This can be another one of the 14 listed above or one not found above. Be sure to describe the process that created it.

Requirements:

- 15 Photographs, 15 Paragraphs

- Photos are limited to Orange County and taken during the current semester. You may use a digital camera. But photos should be at least 3x5 in size.

- Include a table of contents & bibliography. Your photos should be in the order shown above.

- Each photo will have a typed description and paragraph analysis (see below for example). Photo information will include the location, date and time of photo in addition to the specific text chapter and page number of the topic being shown. The analysis will include a definition or explanation of the topic and a detailed description/analysis of how the photo represents the topic. Any information from the text or other source must be properly cited. The more insightful the analysis the higher the project grade.

- Please put enough of an effort so the glue does not stick the pages together, your printer has ink, etc... Do not put pages in plastic sleeves. A fancy scrap booking project will not help your grade. Please put *that* effort into the descriptions instead. At least staple the 16/17 pages together. Failure to bind your project together will have a negative impact on your grade.

- You may need to use outside resources for information specific to Orange County. Any information from the text or other sources must be properly cited – see Plagiarism handout.

Grading

All essays will be graded on the following criteria:

- Photos are neatly & clearly presented including all data & descriptive information.
- Follow instructions, format follows sample given below, includes a table of contents and bibliography.
- A variety of topics from class are illustrated from a variety of locations.
- Appropriate terminology is defined
- Analysis is insightful and clearly related to information covered in class & text.
- Description should not be simply repeating what the text says. This is plagiarism too btw.

Printed photo essays are **due at the beginning of class on May 5th**. You do not have until the end of the class period to turn it in. It is up to you to research information not yet covered in lecture.

Sample Photo Description and Analysis: *(this is just an average description btw)*

Topic:	Mass Wasting
Chapter:	Chap 15 Weathering & Mass Wasting
Page:	436
Date:	Feb 23, 2014
Location:	Ortega Hwy, Mile 4
Description:	Landslide

Analysis: Ortega Highway cuts east out of Orange County through the mountains and along the way the slopes are steep and subjected to mass wasting. The material tumbled down the slope in a process known as a *landslide*. A landslide typically occurs in area with steep slopes as is the case here. Recent rains would have lubricated and added weight to the slope though there was apparently limited mudflow in this event. Road cuts may have also steepened the slope encouraging mass wasting. This landslide was a quick event (as opposed to creep) and will be quickly cleared by CalTrans. One can assume though that given the topography along Ortega that this event may likely re-occur.